

# **Cyber Incident Resource Guide for Governors**

The Cyber Incident Resource Guide for Governors provides information for governors and their staff on how to request federal support during or following a cyber incident.<sup>1</sup> This includes information to help states respond effectively to a cyber incident and guidance to support recovery efforts. For states with mature cyber programs, this Guide can validate and integrate with existing plans. The scope of this document includes cyber incident response; however, appropriate cyber risk management practices can lessen the likelihood or impact of an incident. Refer to Appendix B – Cyber Resilience Resources for information on cyber resilience and related cyber risk management resources. This Guide does not replace a state's cyber incident response plan.

# **CYBER INCIDENT RESPONSE**

Victims of cyber incidents can report to the Department of Homeland Security (DHS), Cybersecurity and Infrastructure Security Agency (CISA), the Federal Bureau of Investigation (FBI), or the United States Secret Service (USSS). These agencies share information with interagency partners; therefore, a state only needs to report an incident once to notify all the other federal agencies who have a role in incident response. Federal agencies collaborate to help states and other affected entities understand the cyber incident, link related incidents, and share information to rapidly respond to and mitigate the incident in a manner that protects privacy and civil liberties. In accordance with Presidential Policy Directive 41 (PPD-41)<sup>i</sup>, upon receiving a report of a cyber incident, the Federal Government focuses its efforts on two activities: Asset Response (Lead: DHS, through CISA) and Threat Response (Lead: DOJ, through FBI). A third line of effort is Intelligence Support (Lead: Office of the Director of National Intelligence (ODNI)). These federal activities integrate with and support the state response (Figure 1).

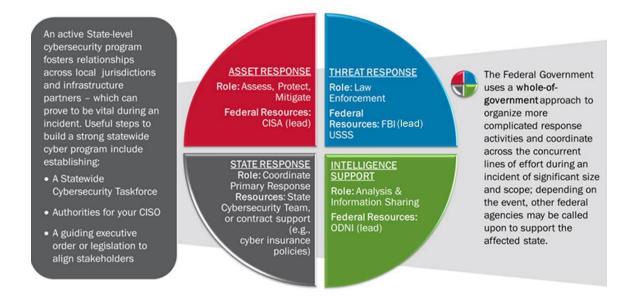


Figure 1: Cyber Incident Response Concurrent Lines of Effort

<sup>1</sup>A cyber incident is an occurrence that actually or potentially jeopardizes the confidentiality, integrity, or availability of digital information or an information system and that constitutes a violation or imminent threat of violation of security policies, security procedures, or acceptable use policies. (Source: <a href="https://csrc.nist.gov/glossary/term/incident">https://csrc.nist.gov/glossary/term/incident</a>)

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Accest Decements	<ul> <li>Description to share the sector to exclude the sector of th</li></ul>
Asset Response:	Provides technical assistance to protect assets and mitigate vulnerabilities in the
ASSESS, PROTECT,	face of malicious cyber activity
MITIGATE	Reduces the impact to systems and/or data
Lead Agency: CISA	Strengthens, recovers, and restores services
	Identifies other entities at risk
	Assesses potential risk to the sector or region
	Facilitates operational information sharing and coordination
	Provides guidance on how to best use federal resources and capabilities
Threat Response:	• Attributes, pursues, and disrupts malicious cyber actors and malicious cyber activity
LAW ENFORCEMENT	Conducts criminal investigations and other actions to counter the malicious cyber
Lead Agency: FBI	activity
Intelligence Support:	Builds situational threat awareness
ANALYSIS AND	Shares related intelligence with asset and threat response organizations
INFORMATION SHARING	Integrates analysis of threat trends and events
Lead Agency: ODNI	Identifies knowledge gaps
	Evaluates the ability to degrade or mitigate adversary threat capabilities

The Federal Government delineates cyber incident response roles as outlined in the table below.

#### **REPORTING A CYBER INCIDENT**

Cyber incidents resulting in significant damage are of particular concern to the Federal Government. States are encouraged to report all cyber incidents that may:

- Result in a significant loss of data, system availability, or control of systems
- Impact many victims
- Indicate unauthorized access to, or malicious software present on, critical IT systems
- Affect critical infrastructure or core government functions
- Impact national security, economic security, or public health and safety<sup>ii</sup>

States can report cyber incidents at various stages, including before complete information is available. Gathering as much information as possible will help expedite assistance to an affected entity. Reporting an incident as soon as practicable may assist affected entity efforts to contain the incident and avoid additional impacts.

After reporting an incident to CISA, FBI, or USSS, based on incident severity, the Federal Government gathers additional information to evaluate the incident and communicate with you regarding available assistance resources.

Contact information to report cyber incidents to the Federal Government is listed in Appendix C.

#### INCIDENT SCORING AND CISA ASSET RESPONSE SUPPORT

CISA created the National Cyber Incident Scoring System (NCISS) based on the Cyber Incident Severity Schema outlined in PPD-41. The NCISS provides a repeatable and consistent risk score. This risk score is used to help determine the prioritization of limited asset response resources and the necessary level of support. An incident is assigned a rating of baseline, low, medium, high, severe, or emergency.<sup>iii</sup>

Based on a state's voluntary incident report to CISA, associated scoring, and available resources, CISA determines which type of support to provide (See Appendix C for specific capabilities):

- Remote assistance (the most frequent type of support provided): Services are provided via video calls, phone calls and email
- Advisory deployment: Only Subject Matter Expert support is provided
- Remote deployment: No teams are deployed. Personnel are deployed only to configure remote operations equipment
- On-site deployment: Equipment and personnel are deployed onsite

The vast majority of incidents reported to CISA are scored as baseline or low (i.e., they are unlikely to impact public health or safety, national security, or other threats to the nation).

# STATE/FEDERAL COORDINATION

The state maintains primary responsibility for managing the effects of cyber incidents on its operations, constituents, and workforce. An affected state engages in a variety of efforts to manage the impact of a cyber incident, which may include maintaining business or operational continuity, addressing adverse financial impacts, protecting privacy, complying with legal and regulatory requirements (including disclosure and notification), engaging in communications with employees or other affected individuals, and dealing with external affairs (e.g., media and congressional inquiries).

State cybersecurity officials may reference <u>CISA's Incident Response and Vulnerability Management Playbook</u> for detailed guidance on creating and executing a cyber incident response plan.

Two changes in version 3 of FEMA's Comprehensive Preparedness Guide (CPG) 101 add flexibility to cyber considerations. CPG-101 now has a Cyber Incident Annex in its templates. According to CPG-101, a Cyber Incident Annex to an Emergency Operations Plan (EOP):

"...identifies and describes the jurisdiction's specific concerns, capabilities, training, agencies and resources to respond to an intentional event occurring on or conducted through a computer network that actually or imminently jeopardizes the confidentiality, integrity or availability of computers; information or communications systems or networks; physical or virtual infrastructure controlled by computers or information systems; or information resident on those systems. Note: Cyber incidents can also result from accidents and unintentional system failures."

In addition, EOPs are no longer required to align annexes to Emergency Support Functions (ESFs). Whether or not state EOPs follow an ESF structure, the Cyber Incident Annex provides guidance for a state's emergency management organization. State-level EOPs that use an ESF structure can embed cyber response activities into applicable ESFs for use by emergency management personnel, for example:

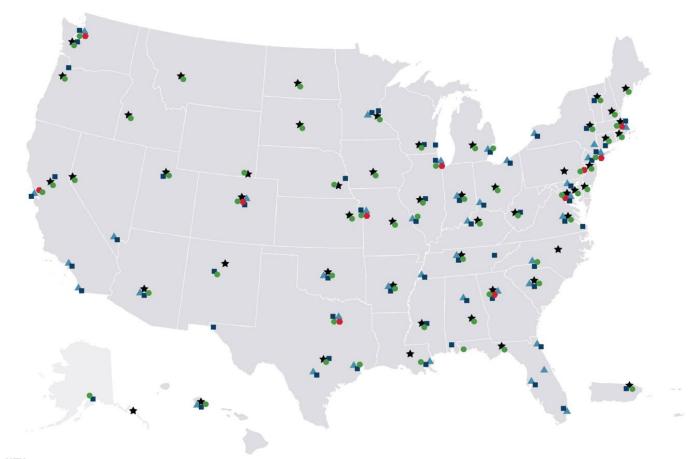
- In Ohio's Emergency Operations Plan, their cyber response plan is found in ESF 2 Communications and Information Technology as "Tab B - Cyber Incident Response Plan"<sup>iv</sup>
- California's Emergency Plan provides a standalone ESF titled "18 CA-ESF Cybersecurity Annex"

Some state cyber incident plans identify federal-level response partners. For example, consistent with PPD-41, South Carolina's Emergency Operations Plan specifically identifies CISA and the FBI for federal-level asset response and threat response support roles, respectively.<sup>vi</sup>

It is important to note that CPG-101 provides guidance to emergency management organizations on how to develop a Comprehensive Emergency Management Plan (CEMP) to document all-hazard capabilities. A state's chief information officer (CIO) or chief information security officer (CISO) may have a stand-alone cyber incident response plan. Regardless of whether a state embeds cyber response into an existing CEMP or establishes a separate cyber incident response plan, each state should clearly identify where they integrate considerations for coordinating with the Federal Government on cyber incident response.

# APPENDIX A – CISA REGIONAL OFFICES, FBI FIELD OFFICES, SECRET SERVICE FIELD OFFICES

All states have Cybersecurity Advisors (CSAs) and/or Cybersecurity State Coordinators (CSCs) on site or in various stages of processing before reporting for duty.



#### KEY:

★State Capitals ● CISA Regional Offices ● CISA CSA/CSC Locations 🔺 US Secret Service Field Offices ■ FBI Field Offices

#### **KEY TO MAP OF FIELD OFFICES**

State	City	CISA Regional Offices	CISA CSA/CSCs	USSS Field Offices	FBI Field Offices
	Birmingham				
Alabama	Mobile				
	Montgomery				
Alaska	Anchorage				
Arizona	Phoenix				
Arkansas	Little Rock				
	Los Angeles				
	Oakland	(Region 9)			
	Sacramento				
California	San Diego				
	San Francisco				
	Roseville				
Colorado	Denver	(Region 8)	•	(Colorado, Wyoming, Utah, and Southern Idaho)	(Colorado and Wyoming)
	New Haven				
Connecticut	Hartford				
Delaware	Dover		٠		
District of Colombia	Washington	(HQ/Region 3)		▲ (HQ)	(HQ)
	Jacksonville				
	Miami				
	Miramar				
Florida	Orlando				
	Pensacola				
	Tallahassee				
	Tampa				
Georgia	Atlanta	(Region 4)			
Hawaii	Honolulu				
nawali	Kapolei				
Idaho	Boise				
Illinoio	Chicago	(Region 5)			
Illinois	Springfield				
Indiana	Indianapolis				
Iowa	Des Moines				
Kansas	Topeka				
Kentucky	Frankfort				
Kentucky	Louisville				
Louisiana	New Orleans				
Maine	Augusta				

⊗ cisa.gov ≤ central@cisa.gov report@cisa.gov

State	City	CISA Regional Offices	CISA CSA/CSCs	USSS Field Offices	FBI Field Offices
Maryland	Baltimore				(Maryland and Delaware)
	Annapolis				
Massachusetts	Boston	(Region 1)	•		(Maine, New Hampshire, Massachusetts, and Rhode Island)
	Chelsea				
Michigan	Detroit		•		
	Lansing		•		
	Brooklyn Center				
Minnesota	Minneapolis				(Minnesota, North Dakota, and South Dakota)
	St Paul				
Mississippi	Jackson				
	Jefferson City				
Missouri	Kansas City	(Region 7)			
	St. Louis				
Montana	Helena				
	Lincoln				
Nebraska	Omaha				(Nebraska and Iowa)
Nevada	Carson City				
	Las Vegas				
New Hampshire	Concord				
	Newark				
New Jersey	Trenton				
New Mexico	Albuquerque				
New York	Albany		٠		(Vermont)
	Buffalo				
	New York	(Region 2)			
North Carolina	Charlotte				
North Dakota	Bismarck				
Ohia	Cincinnati				
Ohio	Cleveland				

State	City	CISA Regional Offices	CISA CSA/CSCs	USSS Field Offices	FBI Field Offices
	Columbus		•		
Oklahoma	Oklahoma City		٠		
Oregon	Portland				
	Salem				
	Harrisburg				
Pennsylvania	Philadelphia	(Region 3)			
	Pittsburgh				
Puerto Rico	San Juan		•		(Puerto Rico and the U.S. Virgin Islands)
Rhode Island	Providence		٠		
South Carolina	Columbia		٠		
South Dakota	Pierre		•		
	Knoxville				
Tennessee	Memphis				
	Nashville				
	Austin		•		
	Dallas	(Region 6)	•		
Texas	El Paso				
	Houston		•		
	San Antonio				
Utah	Salt Lake City		•		(Utah, Idaho, and Montana)
Vermont	Montpelier				
Virginia	Chesapeake				
Virginia	Richmond				
Washington	Olympia				
	Seattle	(Region 10)			
West Virginia	Charleston		•		
Wisconsin	Madison				
	St. Francis				
Wyoming	Cheyenne				

## **APPENDIX B – CYBER RESILIENCE RESOURCES**

Build cyber resilience in your state by establishing a framework for whole-of-state coordination on cybersecurity policy, information sharing, and operations. Establishing these roles and responsibilities enables your state to better manage cyber risk during steady state and respond to an incident in a consistent, efficient, and organized manner.

- CISA provides access to several cyber risk management resources in steady state that may help increase the overall cybersecurity posture of your state; many are listed here: <a href="https://www.cisa.gov/cyber-resource-hub">https://www.cisa.gov/cyber-resource-hub</a>.
- Continuous improvement and measuring progress through assessment, such the CISA-funded Nationwide Cybersecurity Review (NCSR), is vital to mature your state's cyber capabilities and risk management approach and identify areas for improvement. Access the NCSR at <u>https://www.cisecurity.org/ms-isac/services/ncsr/</u>.

State, local, tribal, and territorial (SLTT) governments can join the Multi-State Information Sharing and Analysis Center (MS-ISAC) at no cost. MS-ISAC members receive direct access to cybersecurity advisories and alerts, incident response resources, network defense services, and more.

Based on your state's use of CISA assessment and cybersecurity services or ongoing cyber defensive operations, CISA headquarters or regional personnel may notify you of imminent malicious cyber activity, vulnerabilities, and other pertinent information. Your state should be prepared to receive these communications, whether through POCs designated as the primary points of contact for a particular service (e.g., CISA Vulnerability Scanning) or by designating a cross-functional group as part of your participation in the Joint Cyber Defense Collaborative (JCDC) (further information below).

Cyber resilience is reinforced by the National Institute of Standards and Technology (NIST) Cybersecurity Framework (see Figure 2) and takes sustained effort across all functions to manage cyber risk in the face of the continuously evolving cyber landscape. This Guide primarily focuses on the "Respond" function. Aligning your state cybersecurity program with the NIST Cybersecurity Framework will strengthen your capability to manage cyber risk and better position your state to identify, protect, detect, respond to, and recover from a cyber incident.

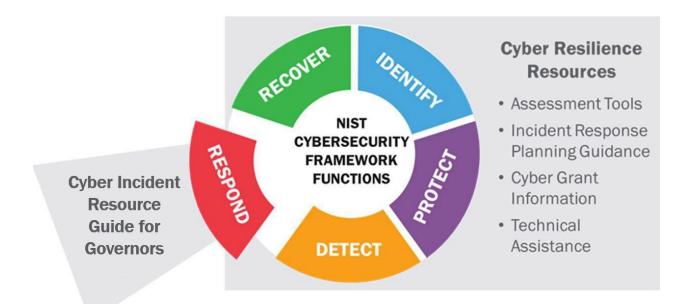


Figure 2: The Cyber Incident Resource Guide for Governors focuses on the "Respond" function of the NIST Cybersecurity Framework

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#### **CISA REGIONAL PERSONNEL**

CISA has ten regions, aligned to the FEMA regions. Through officesvii in each region, regional personnel manage mission execution through steady state and incident operations and analyze risks to critical infrastructure. Each Regional Director leads a cadre of security professionals located throughout the region.

Each CISA Region has regional and state CSAs, CSCs, Protective Security Advisors (PSAs), Emergency Communications Coordinators (ECCs), and other CISA personnel. These field personnel advise and assist in training and exercising best practices to help achieve robust resilience.

- CSAs prepare and protect a state from cybersecurity threats by helping partners enhance cybersecurity preparedness, risk mitigation, and incident response capabilities. They engage stakeholders through partnership and direct assistance activities, including policy-based cybersecurity assessments.
- CSCs are appointed to serve in each state. CSCs serve as the federal cybersecurity risk advisors; support cybersecurity preparation, response, and remediation efforts; facilitate the sharing of cyber threat information; and help SLTT governments develop cybersecurity plans.
- PSAs are trained critical, infrastructure, protection, and vulnerability mitigation subject matter experts who . facilitate local field activities in coordination with other DHS offices. They also advise and assist state, local, and private sector officials and critical infrastructure facility owners and operators.
- ECCs support emergency communications interoperability by offering training tools, workshops, and regional • support. CISA assists Emergency Preparedness Communities in establishing seamless and secure communications, supporting public safety and national security.

#### BUILDING CYBER RESILIENCE THROUGH THE JOINT CYBER DEFENSE COLLABORATIVE

As we look to the future of building cyber resilience across the nation, CISA has established a new collaborative to strengthen cybersecurity collaborations across the Federal Government, private sector critical infrastructure owners andoperators, and SLTT governments. The JCDC is a forum to develop deliberate and rapid and reactive plans for whole-of-nation cyber defense operations.

As critical JCDC partners, SLTT entities will have the opportunity to participate in planning efforts to jointly defend critical systems and our country's national critical functions against malicious cyber activity. CISA encourages cross-functional, whole of entity participation in JCDC. Depending on state preferences and organizational structure, this may include representation from the Governor's Office, state CIO or CISO's Office, Homeland Security, Emergency Management, Fusion Center, State Police, or Elections.

For more information on JCDC, see www.cisa.gov/jcdc or contact CyberLiaison\_SLTT@cisa.dhs.gov.

#### ADDITIONAL CYBER RESILIENCE RESOURCES

Table 2 lists resources for additional information on important topics such as assessments, cyber planning, and cyber grants.

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Table 2: Steady State Services

Support Mechanism and Website	Description
CISA Cyber Essentials	A guide for leaders of small businesses and small and local government agencies to develop an actionable understanding of where to start implementing organizational cybersecurity best practices.
CISA Cyber Resource Hub	A range of cybersecurity assessments that evaluate operational resilience, cybersecurity practices, organizational management of external dependencies, and other key elements of a robust and resilient cyber framework.
CISA Incident Response Training	No-cost cyber incident response training for government employees and contractors across federal and SLTT governments.
CISA Ransomware Guide	A guide aimed at being a one-stop resource with best practices and ways to prevent, protect and/or respond to a ransomware attack. Includes a ransomware response checklist.
CISA SAFECOM	A series of documents that includes resources about the National Emergency Communications Plan, education and outreach programs, and the specific issues and barriers that affect interoperability of communications.
Federal GovernmentCybersecurityIncident andVulnerabilityResponse Playbooks	A standard set of operational procedures to be used in planning and conducting cybersecurity vulnerability and incident response activities for federal civilian agency information systems. Also applicable for SLTT government use.
Multi-State Information Sharing and Analysis Center	Funded by CISA as the focal point for cyber threat prevention, protection, response, and recovery for the Nation's SLTT governments.
Nationwide Cybersecurity Review	A no-cost, anonymous, annual self-assessment conducted by the MS-ISAC on CISA's behalf to measure gaps and capabilities of SLTT governments' cybersecurity programs. Based on the National Institute of Standards and Technology Cybersecurity Framework.
National Institute of Standards and Technology Cybersecurity Framework	A framework of standards, guidelines, and practices to promote the protection of critical infrastructure. The framework's prioritized, flexible, repeatable, and cost-effective approach helps owners and operators of critical infrastructure manage cybersecurity-related risk.

# **APPENDIX C – FEDERAL CYBER INCIDENT RESPONSE CONTACTS**

Federal Asset Response Contacts	Federal Threat Response Contacts
<ul> <li>Federal asset response includes:</li> <li>Providing technical assistance to affected entities, upon request, to protect their assets, mitigate vulnerabilities, and reduce impacts of cyber incidents while identifying other entities that may be at risk</li> <li>Assessing potential risks to the sector or region</li> <li>Facilitating information sharing and operational coordination</li> <li>Providing guidance on how to best use federal resources and capabilities</li> </ul>	<ul> <li>Federal threat response includes law enforcement and national security investigative activity, including:</li> <li>Collecting evidence and intelligence</li> <li>Developing attribution</li> <li>Linking related incidents</li> <li>Identifying additional affected entities</li> <li>Identifying threat pursuit and disruption opportunities</li> <li>Developing and executing action to mitigate the immediate threat</li> <li>Facilitating information sharing and operational coordination with asset response</li> </ul>
<ul> <li>What You Can Expect:</li> <li>Specific guidance to help evaluate and remediate cyber incidents</li> <li>Remote assistance to identify the extent of the compromise and recommendations for appropriate containment and mitigation strategies</li> <li>Analysis of phishing emails, storage media, logs, and malware (full-disk forensics on an as-needed basis)</li> </ul>	<ul> <li>What You Can Expect:</li> <li>Assistance in conducting a criminal investigation, which may involve collecting incident artifacts, to include system images and malware samples</li> </ul>
CISA Central: https://us-cert.cisa.gov/report central@cisa.gov report@cisa.gov (888) 282-0870 CISA Cybersecurity Advisor: https://www.cisa.gov/cisa-regions [Enter your local CISA CSA's phone and email] CISA Cybersecurity State Coordinator: [Enter your local CISA CSC's phone and email]	<ul> <li>FBI Field Office:</li> <li><u>https://www.fbi.gov/contact-us/field-offices/</u></li> <li>[Enter your local FBI field office POC phone and email]</li> </ul>
MS-ISAC Coordination <sup>viii</sup> An expertly trained Computer Incident Response Team (assists SLTT organizations, including by providing the following free services: emergency conference calls, forensic analysis, log analysis, mitigation recommendations, and reverse engineering.	U.S. Secret Service Cyber Fraud Task Force(s) <sup>ix</sup> Coordination: The Special Agent in Charge from the nearest field office assesses the situation, then activates other assets as needed. This may include cyber forensics teams and/or network intrusion responders. Any dignitary protection mission in the area takes precedence and may delay deployment.
<ul> <li><u>soc@msisac.org</u></li> <li>(866) 787-4722</li> </ul>	<ul> <li>USSS Field Office:</li> <li><u>https://www.secretservice.gov/contact/field-offices</u></li> <li>[Enter your local USSS field office POC phone and email]</li> </ul>

### **APPENDIX D – ENDNOTES**

- <sup>i</sup> Presidential Policy DirectivePPD-41 United States Cyber Incident Coordination
- <sup>ii</sup> Cyber Incident Reporting United Message.pdf (dhs.gov)
- iii CISA National Cyber Incident Scoring System
- iv <u>https://ema.ohio.gov/EOP\_Overview.aspx;</u>

- vi https://scemd.org/media/1367/appendix-16-sc-cyber-incident-consequence-managment-plan.pdf
- vii https://www.cisa.gov/cisa-regions
- viii https://www.cisecurity.org/isac/report-an-incident/
- ix https://www.secretservice.gov/investigation/cyber

<sup>&</sup>lt;sup>v</sup> https://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/state-of-california-emergency-plan-emergencysupport-functions